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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/088,968

07/10/2002

Steffen Thiel

10191/2255

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7590

02/06/2008

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EXAMINER

SELLERS, DANIEL R

ART UNIT

PAPER NUMBER

2615

MAIL DATE

DELIVERY MODE

02/06/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/088,968

Applicant(s)

THIEL ET AL.

Examiner

Daniel R. Sellers

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see p. 6, filed 10/26/07, with respect to the IDS have been fully considered and are persuasive. The objection has been withdrawn.
2. Applicant's arguments, see pp. 7-8, filed 10/26/07, with respect to Van Ryzin have been fully considered but they are not persuasive.

The examiner respectfully disagrees that Van Ryzin necessarily teaches a linear order and does not teach a non-linear order. The recited limitation "having a nonlinear order with respect to matrix elements" is given the broadest reasonable meaning and does not incorporate non-claimed features from the specification. The applicant appears to have mischaracterized Van Ryzin by citing certain portions in isolation without considering the reference in its entirety. Van Ryzin, when considered in its entirety, teaches a non-linear priority table.

In figure 3, Van Ryzin illustrates that there are three states to consider: X= do not care, 1= signal exists, and 0= signal does not exist. The compact disc player (CD) output is given first priority when its signal exists (1) and disregards all other inputs (X), whereas Video 1 (VID1) is given sixth priority when its signal exists (1) and Video 2's (VID2) signal does not exist (0). Video 2 has lower priority in seventh place, but its output is chosen over the sixth slot (VID1) when both signals exist (i.e., VID2=1 and is chosen over VID1, where VID1=X, meaning X can be a 1 or a 0, as it is a do not care). This in itself appears to teach a non-linear order in the priority matrix. However, this chart is confusing, because it shows the tape cassette (TAPE) output being given

priority even when the CD output is a do not care (i.e., CD could be a 1, which seems to contradict the priority order).

Van Ryzin, when considered fully, either contains errors in its table or another consideration must be made. In column 4, lines 21-39, Van Ryzin teaches an editable priority table, wherein the user can change the priorities and priority is also given to the most recently turned on device (i.e., The TV signal has priority over the CD player when it is turned on after the CD player). Therefore, the recitations of figure 3, column 4, lines 32-39, and column 5, lines 30-44 teach a non-linear priority matrix.

3. Applicant's arguments with respect to claims 27 and 28 have been fully considered but they are not persuasive. They are not persuasive, because Van Ryzin teaches a non-linear priority order.

Drawings

4. The drawings were received on 10/26/07. These drawings are acceptable.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 16-26 and ~~30-34~~³⁰⁻³²** are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Van Ryzin, USPN 6,052,471. 46

7. Regarding **claim 16**, Van Ryzin teaches a control device for establishing an information-output ranking of a plurality of information sources including audio sources (abstract), comprising:

*an arrangement for establishing the information-output ranking in pairs for the audio sources in an information-output matrix set-up having a nonlinear order with respect to matrix elements; (figure 3, column 4, lines 32-39, and column 5, lines 30-44) and
an arrangement for outputting information from the information sources to a common information-output device (column 1, lines 13-34).*

8. Regarding **claim 17**, the further limitation of claim 16, Van Ryzin teaches a control device, further comprising a selection device for selecting different attributes which are assigned to the matrix elements of an information-source pair (column 4, lines 21-27 and figure 3).

9. Regarding **claim 18**, the further limitation of claim 17, Van Ryzin teaches the control device, further comprising an input device for inputting the matrix elements together with the selected attributes (column 4, lines 27-28).

10. Regarding **claim 19**, the further limitation of claim 16, Van Ryzin teaches the control device, further comprising a video screen (column 1, lines 21-23 and lines 41-45).

11. Regarding **claim 20**, the further limitation of claim 18, Van Ryzin teaches the control device, further comprising a storage device for storing the inputted matrix elements (see the preceding argument with respect to claim 17, the creation and editing of the priority table inherently uses a storage device for storing the inputted matrix).

12. Regarding **claim 21**, the further limitation of claim 16, Van Ryzin teaches the control device, further comprising a management device for managing a series of information sources in a waiting list (column 4, lines 32-39).

13. Regarding **claim 22**, the further limitation of claim 16, Van Ryzin teaches the control device, wherein the information-output device is at least one of a loudspeaker and a headphone (column 1, lines 24-34; teaches a typical receiver in a home theater setup, which typically uses one of a loudspeaker and a headphone for audio output).

14. Regarding **claim 23**, see the preceding argument with respect to claim 16. Van Ryzin teaches these features, wherein the output is to a common pre-amplifier stage of the receiver (figure 1 & 2).

15. Regarding **claim 24**, the further limitation of claim 23, see the preceding argument with respect to claim 17. Van Ryzin teaches these features.

16. Regarding **claim 25**, the further limitation of claim 23, see the preceding argument with respect to claim 18. Van Ryzin teaches these features.

17. Regarding **claim 26**, the further limitation of claim 23, see the preceding argument with respect to claim 20. Van Ryzin teaches these features.

18. Regarding **claim 30**, the further limitation of claim 23, see the preceding argument with respect to claim 21. Van Ryzin teaches these features.

19. Regarding **claim 31**, the further limitation of claim 16, see the preceding argument with respect to claim 16. Van Ryzin teaches a control device, wherein each matrix element determines the priority of a first audio device (e.g., VID2) with respect to a second audio source (e.g., VID1).

20. Regarding **claim 32**, the further limitation of claim 16, see the preceding argument with respect to claim 16. Van Ryzin teaches the control device of claim 16, wherein the arrangement for establishing the information-output ranking establishes a nonlinear priority ordering of the audio sources (column 4, lines 32-39).

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. **Claims 27 and 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Ryzin as applied to claim 26 above, and further in view of Callahan, USPN 4,306,114.

23. Regarding **claim 27**, the further limitation of claim 26, Van Ryzin teaches the control method, further comprising the step of selecting, based on an attribute of a matrix element assigned to an information-source pair by interruption (see the preceding argument with respect to claim 23). Van Ryzin does not teach the selection between relieving and interrupting the corresponding information source that is active longer.

Callahan teaches an automatic selection between priorities by digitally fading the signal (column 1, lines 7-15 and figure 2, unit 38), wherein fading teaches a mode of selection which relieves or interrupts the corresponding information source that is active

longer (column 1, line 46 - column 2, line 15). It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Van Ryzin and Callahan for the purpose of selecting a method of switching. Callahan teaches the selection of gently fading in and out of music directly, and the selection of interrupting is implied by the prior art of Callahan. Furthermore the selection would allow the user to have editing control, wherein the solution of switching abruptly would be desirable in some situations, (i.e. to avoid the noise caused by the turntable when the needle reaches the end of a record).

24. Regarding **claim 28**, the further limitation of claim 26, see the preceding argument with respect to claim 27. The combination of Van Ryzin and Callahan teaches the selection between an abrupt transition and a smooth cross-fading.

25. **Claims 29, 33, and 34** are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Ryzin as applied to claim 26 above, and further in view of Hadley et al., USPN 5,243,640 (hereinafter Hadley).

26. Regarding **claim 29**, the further limitation of claim 26, see the preceding argument with respect to claim 26. Van Ryzin teaches the features of claim 26. However, Van Ryzin does not teach the selection between separating and superposing two corresponding information sources.

Hadley teaches a system, which selects by priority between an audio system and a cellular phone (abstract, column 1, line 62 - column 2, line 10). It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the

teachings of Van Ryzin and Callahan for providing a priority for telephones in a home theater or other audio setup.

27. Regarding **claim 33**, the further limitation of claim 16, see the preceding argument with respect to claim 16. In the combination, Van Ryzin teaches the control device of claim 16, wherein the priority matrix is also user editable (column 4, lines 21-28). Hadley teaches a matrix wherein a matrix element has a first and second attribute, wherein the first attribute determines the priority of a first audio source with respect to a second audio source, and the second attribute determines a manner of interruption of a higher priority one of the first and second audio sources with respect to a lower priority one of the first and second audio sources (column 3, lines 33-64 and figure 4). It would have been obvious for one of ordinary skill in the art at the time of the invention to extend this idea of interruption by mixing or by muting with another matrix element. For example, a radio and another device could have different interruptions based on functions of each system determining whether or not the audio is interrupted or mixed together.

28. Regarding **claim 34**, the further limitation of claim 16, see the preceding argument with respect to claim 16. In the combination, Van Ryzin teaches the control device of claim 16, wherein Hadley teaches first and second attributes. Van Ryzin teaches user controls to edit the priority matrix, and it is obvious to allow the same user controls to edit each attribute.

Conclusion

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wagner, USPN 4,742,348 - teaches a matrix device for the assignment of priorities (abstract);

Donner, USPN 5,722,069 - teaches a priority system in a vehicle (abstract); and

Becker, USPN 6,157,725 - teaches another priority system in a vehicle (abstract and figure 1).

30. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel R. Sellers whose telephone number is 571-272-7528. The examiner can normally be reached on Monday to Friday, 9am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571)272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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SUPERVISORY PATENT EXAMINER

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